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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/578,170

10/04/2006

Dennis Mason

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7590 06/23/2011
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EXAMINER

PHASGE, ARUN S

ART UNIT

PAPER NUMBER

1724

MAIL DATE

DELIVERY MODE

06/23/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/578,170 | Applicant(s) MASON ET AL. | |
| | Examiner ARUN S. PHASGE | Art Unit 1724 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26, 28, 31-46 and 49-62 is/are pending in the application.
- 4a) Of the above claim(s) 50-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26, 28, 31-45, 49 is/are rejected.
- 7) ☐ Claim(s) 31, 32, 46 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

This application contains claims 50-62 drawn to an invention nonelected with traverse in the reply filed on 7/1/10. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

Claims 27-30, 45-46 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims are apparatus claims, accordingly, the functional limitations fail to structurally further limit the claims from which they depend.

Claim Rejections - 35 USC § 103

Claims 26-28, 33-45 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodger et al. (Bodger), U.S. Patent 5,851,375 in view of Igarashi, U.S. Patent 6,706,168.

The Bodger patent disclose an installation for the treatment of water, comprising a treatment component having an internal passage through which water may flow and electrodes connected to an electric current source, characterized in that at least one electrically insulating pip allowing for water to flow therethrough provided with electrodes whereby water flowing therethrough may be subjected to an electric current thereby to destroy live organisms therein (see figure 1, and col. 4, line 45 to col. 5, line 5). The patent further discloses the use of AC (see col. 4, lines 1-45) the exact phase of the would have been within the skill of the ordinary artisan.

The Bodger patent fails to disclose the plurality of pipes, the size of the pipes or the arrangement of the pipes within a "coat".

The Igarashi patent discloses the modification to use a plurality electrodes and cells as claimed, wherein the patent uses a plurality of pipe shaped electrodes to obtain the benefits of using such a multiple arrangement (see col. 5, lines 1-33). The patent

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further teaches when the plural cells are used, they are attached together, which would be encompassed by the "coat".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bodger by the teachings of Igarashi.

One having ordinary skill in the art would have been motivated to do this modification, because the Igarashi patent teaches the pluralization of electrochemical cells to obtain more efficient treatment thereof. Further limitations to the size and arrangement have been well settled to be within the purview of the ordinary artisan, unless such modification produces an unexpected result.

Allowable Subject Matter

Claims 31, 32, 46 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 4/8/11 have been fully considered but they are not persuasive.

Applicants argue that Igarashi "does not disclose a plurality of pipes."

As shown in the prior Action, the Igarashi patent discloses a plurality of pipe shaped electrodes, hence the patent does disclose a plurality of pipes (see figure 4 for example and col. 5, lines 17-23).

Applicants argue that the Igarashi patent treats a body of water that is static, whereas the Bodger patent uses the flow of water to treat the water.

Applicants' argument has no basis in fact, since the Igarashi patent does not even use the word static. The figure seems to disclose a batch type process, however, even the batch type process is not static.

Applicants further allege that Bodger uses a voltage gradient to kill microorganisms whereas Igarashi employs the AC voltage in a different manner.

The entirety of the Igarashi patent is not found in the two lines quoted out of context. The patent claims that the application of the AC voltages, results "in an electrochemical reaction, the generation of fine bubbles, and the fractionation of minute solid particles, crystal, bubbles, sludge and organisms..."

Therefore, contrary to applicants allegation, one having ordinary skill would have been motivated by the teachings of Igarashi to modify the device of Bodger to kill

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microorganisms, because the Igarashi patent discloses the application of AC voltages results in the fractionation of the organisms.

Consequently, the claims stand rejected.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARUN S. PHASGE whose telephone number is (571)272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith D. Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ARUN S PHASGE/
Primary Examiner, Art Unit 1724

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